

SEQUENCE LISTING

<110> Gao, Zeren

<120> Murine Cytokine Receptor

<130> 00-46

<160> 8

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 2256

<212> DNA

<213> mouse

<220>

<221> CDS

<222> (197) ... (2218)

<400> 1

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caggggacgag ggggtctgccc ccccttgggg gggcaggacg gggcctcagg cctgggtgct	180
gtccggcacc tggaag atg cct gtg tcc tgg ttc ctg ctg tcc ttg gca ctg	232
Met Pro Val Ser Trp Phe Leu Leu Ser Leu Ala Leu	
1 5 10	
ggc cga aac cct gtg gtc gtc tct ctg gag aga ctg atg gag cct cag	280
Gly Arg Asn Pro Val Val Val Ser Leu Glu Arg Leu Met Glu Pro Gln	
15 20 25	
gac act gca cgc tgc tct cta ggc ctc tcc tgc cac ctc tgg gat ggt	328
Asp Thr Ala Arg Cys Ser Leu Gly Leu Ser Cys His Leu Trp Asp Gly	
30 35 40	
gac gtg ctc tgc ctg cct gga agc ctc cag tct gcc cca ggc cct gtg	376
Asp Val Leu Cys Leu Pro Gly Ser Leu Gln Ser Ala Pro Gly Pro Val	
45 50 55 60	
cta gtg cct acc cgc ctg cag acg gag ctg gtg ctg agg tgt cca cag	424
Leu Val Pro Thr Arg Leu Gln Thr Glu Leu Val Leu Arg Cys Pro Gln	
65 70 75	
aag aca gat tgc gcc ctc cgt gtc cgt gtg gtg gtc cac ttg gcc gtg	472
Lys Thr Asp Cys Ala Leu Arg Val Arg Val Val Val His Leu Ala Val	
80 85 90	
cat ggg cac tgg gca gag cct gaa gaa gct gga aag tct gat tca gaa	520
His Gly His Trp Ala Glu Pro Glu Glu Ala Gly Lys Ser Asp Ser Glu	
95 100 105	
ctc cag gag tct agg aac gcc tct ctc cag gcc cag gtg gtg ctc tcc	568
Leu Gln Glu Ser Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu Ser	
110 115 120	
ttc cag gcc tac ccc atc gcc cgc tgt gcc ctg ctg gag gtc cag gtg	616
Phe Gln Ala Tyr Pro Ile Ala Arg Cys Ala Leu Leu Glu Val Gln Val	
125 130 135 140	

ccc gct gac ctg gtg cag cct ggt cag tcc gtg ggt tct gcg gta ttt	664
Pro Ala Asp Leu Val Gln Pro Gly Gln Ser Val Gly Ser Ala Val Phe	
145 150 155	
gac tgt ttc gag gct agt ctt ggg gct gag gta cag atc tgg tcc tac	712
Asp Cys Phe Glu Ala Ser Leu Gly Ala Glu Val Gln Ile Trp Ser Tyr	
160 165 170	
acg aag ccc agg tac cag aaa gag ctc aac ctc aca cag cag ctg cct	760
Thr Lys Pro Arg Tyr Gln Lys Glu Leu Asn Leu Thr Gln Gln Leu Pro	
175 180 185	
gat ggt gac aat gtc ctt ctg aca ctg gat gtc tct gag gag cag gac	808
Asp Gly Asp Asn Val Leu Leu Thr Leu Asp Val Ser Glu Glu Gln Asp	
190 195 200	
ttt agc ttc tta ctg tac ctg cgt cca gtc ccg gat gct ctc aaa tcc	856
Phe Ser Phe Leu Leu Tyr Leu Arg Pro Val Pro Asp Ala Leu Lys Ser	
205 210 215 220	
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Leu Trp Tyr Lys Asn Leu Thr Gly Pro Gln Asn Ile Thr Leu Asn His	
225 230 235	
aca gac ctg gtt ccc tgc ctc tgc att cag gtg tgg tgc cta gag cca	952
Thr Asp Leu Val Pro Cys Leu Cys Ile Gln Val Trp Ser Leu Glu Pro	
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Asp Ser Glu Arg Val Glu Phe Cys Pro Phe Arg Glu Asp Pro Gly Ala	
255 260 265	
cac agg aac ctc tgg cac ata gcc agg ctg cgg gta ctg tcc cca ggg	1048
His Arg Asn Leu Trp His Ile Ala Arg Leu Arg Val Leu Ser Pro Gly	
270 275 280	
gta tgg cag cta gat gcg cct tgc tgt ctg ccg ggc aag gta aca ctg	1096
Val Trp Gln Leu Asp Ala Pro Cys Cys Leu Pro Gly Lys Val Thr Leu	
285 290 295 300	
tgc tgg cag gca cca gac cag agt ccc tgc cag cca ctt gtg cca cca	1144
Cys Trp Gln Ala Pro Asp Gln Ser Pro Cys Gln Pro Leu Val Pro Pro	
305 310 315	
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Val Pro Gln Lys Asn Ala Thr Val Asn Glu Pro Gln Asp Phe Gln Leu	
320 325 330	
gtg gca ggc cac ccc aac ctc tgt gtc cag gtg agc acc tgg gag aag	1240
Val Ala Gly His Pro Asn Leu Cys Val Gln Val Ser Thr Trp Glu Lys	
335 340 345	
gtt cag ctg caa gcg tgc tcg tgg gct gac tcc ttg ggg ccc ttc aag	1288
Val Gln Leu Gln Ala Cys Ser Trp Ala Asp Ser Leu Gly Pro Phe Lys	
350 355 360	
gat gat atg ctg tta gtg gag atg aaa acc ggc ctc aac aac aca tca	1336
Asp Asp Met Leu Leu Val Glu Met Lys Thr Gly Leu Asn Asn Thr Ser	
365 370 375 380	
gtc tgt gcc ttg gaa ccc agt ggc tgt aca cca ctg ccc agc atg gcc	1384

[illegible]

Asp Ala Leu Gln Gly Gly Cys Ser Thr Ser Ala Gly Arg Pro Ala Asp
625 630 635

cgg gtg gaa cga gtg acc cag gcg ctg cgg tcc gcc ctg gac agc tgt 2152
Arg Val Glu Arg Val Thr Gln Ala Leu Arg Ser Ala Leu Asp Ser Cys
640 645 650

act tct agc tcg gaa gcc cca ggc tgc tgc gag gaa tgg gac ctg gga 2200
Thr Ser Ser Ser Glu Ala Pro Gly Cys Cys Glu Glu Trp Asp Leu Gly
655 660 665

ccc tgc act aca cta gaa taaaagccga tacagtattc ctaaaaaaaa 2248
Pro Cys Thr Thr Leu Glu
670

aaaaaaaa 2256

<210> 2
<211> 674
<212> PRT
<213> mouse

<400> 2

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Val Val Val Ser Leu Glu Arg Leu Met Glu Pro Gln Asp Thr Ala Arg
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Cys Ser Leu Gly Leu Ser Cys His Leu Trp Asp Gly Asp Val Leu Cys
35 40 45

Leu Pro Gly Ser Leu Gln Ser Ala Pro Gly Pro Val Leu Val Pro Thr
50 55 60

Arg Leu Gln Thr Glu Leu Val Leu Arg Cys Pro Gln Lys Thr Asp Cys
65 70 75 80

Ala Leu Arg Val Arg Val Val Val His Leu Ala Val His Gly His Trp
85 90 95

Ala Glu Pro Glu Glu Ala Gly Lys Ser Asp Ser Glu Leu Gln Glu Ser
100 105 110

Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr
115 120 125

Pro Ile Ala Arg Cys Ala Leu Leu Glu Val Gln Val Pro Ala Asp Leu
130 135 140

Val Gln Pro Gly Gln Ser Val Gly Ser Ala Val Phe Asp Cys Phe Glu
145 150 155 160

Ala Ser Leu Gly Ala Glu Val Gln Ile Trp Ser Tyr Thr Lys Pro Arg
165 170 175

Tyr Gln Lys Glu Leu Asn Leu Thr Gln Gln Leu Pro Asp Gly Asp Asn
180 185 190

Val Leu Leu Thr Leu Asp Val Ser Glu Glu Gln Asp Phe Ser Phe Leu
195 200 205

Leu Tyr Leu Arg Pro Val Pro Asp Ala Leu Lys Ser Leu Trp Tyr Lys
210 215 220

Asn Leu Thr Gly Pro Gln Asn Ile Thr Leu Asn His Thr Asp Leu Val
225 230 235 240

Pro Cys Leu Cys Ile Gln Val Trp Ser Leu Glu Pro Asp Ser Glu Arg
245 250 255

Val Glu Phe Cys Pro Phe Arg Glu Asp Pro Gly Ala His Arg Asn Leu
260 265 270

Trp His Ile Ala Arg Leu Arg Val Leu Ser Pro Gly Val Trp Gln Leu
275 280 285

Asp Ala Pro Cys Cys Leu Pro Gly Lys Val Thr Leu Cys Trp Gln Ala
290 295 300

Pro Asp Gln Ser Pro Cys Gln Pro Leu Val Pro Pro Val Pro Gln Lys
 305 310 315 320
 Asn Ala Thr Val Asn Glu Pro Gln Asp Phe Gln Leu Val Ala Gly His
 325 330 335
 Pro Asn Leu Cys Val Gln Val Ser Thr Trp Glu Lys Val Gln Leu Gln
 340 345 350
 Ala Cys Ser Trp Ala Asp Ser Leu Gly Pro Phe Lys Asp Asp Met Leu
 355 360 365
 Leu Val Glu Met Lys Thr Gly Leu Asn Asn Thr Ser Val Cys Ala Leu
 370 375 380
 Glu Pro Ser Gly Cys Thr Pro Leu Pro Ser Met Ala Ser Thr Arg Ala
 385 390 395 400
 Ala Arg Leu Gly Glu Glu Leu Leu Gln Asp Phe Arg Ser His Gln Cys
 405 410 415
 Met Gln Leu Trp Asn Asp Asp Asn Met Gly Ser Leu Trp Ala Cys Pro
 420 425 430
 Met Asp Lys Tyr Ile His Arg Arg Trp Val Leu Val Trp Leu Ala Cys
 435 440 445
 Leu Leu Leu Ala Ala Ala Leu Phe Phe Phe Leu Leu Leu Lys Lys Asp
 450 455 460
 Arg Arg Lys Ala Ala Arg Gly Ser Arg Thr Ala Leu Leu Leu His Ser
 465 470 475 480
 Ala Asp Gly Ala Gly Tyr Glu Arg Leu Val Gly Ala Leu Ala Ser Ala
 485 490 495
 Leu Ser Gln Met Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg
 500 505 510
 Glu Leu Ser Ala His Gly Ala Leu Ala Trp Phe His His Gln Arg Arg
 515 520 525
 Arg Ile Leu Gln Glu Gly Gly Val Val Ile Leu Leu Phe Ser Pro Ala
 530 535 540
 Ala Val Ala Gln Cys Gln Gln Trp Leu Gln Leu Gln Thr Val Glu Pro
 545 550 555 560
 Gly Pro His Asp Ala Leu Ala Ala Trp Leu Ser Cys Val Leu Pro Asp
 565 570 575
 Phe Leu Gln Gly Arg Ala Thr Gly Arg Tyr Val Gly Val Tyr Phe Asp
 580 585 590
 Gly Leu Leu His Pro Asp Ser Val Pro Ser Pro Phe Arg Val Ala Pro
 595 600 605
 Leu Phe Ser Leu Pro Thr Gln Leu Pro Ala Phe Leu Asp Ala Leu Gln
 610 615 620
 Gly Gly Cys Ser Thr Ser Ala Gly Arg Pro Ala Asp Arg Val Glu Arg
 625 630 635 640
 Val Thr Gln Ala Leu Arg Ser Ala Leu Asp Ser Cys Thr Ser Ser Ser
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 Glu Ala Pro Gly Cys Cys Glu Glu Trp Asp Leu Gly Pro Cys Thr Thr
 660 665 670
 Leu Glu

<210> 3
 <211> 2022
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> This degenerate nucleotide sequence encodes the
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<221> misc_feature
 <222> (1)...(2022)
 <223> n = A,T,C or G

<400> 3

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 ytntgggagyg gngaygtnyt ntgyytnccn ggnwsnytn arwsngcncc nggncngtn 180
 ytngtnccna cnmgnytnca racngarytn gtntnmgnt gyccncaraa racngaytgy 240
 gcnytnmgng tnmngntngt ngtncaaytn gcngtncaayg gncaytgggc ngarcengar 300
 gargcnggna arwsngayws ngarytnear garwsnmgna aygcnwsnyt ncargcncar 360
 gtngtnytnw snttycargc ntayccnath gcnmgntgyg cnytnytnga rgtncargtn 420
 ccngengayy tngtnearcc nggncarwsn gtnggnwsng cngtnnttyga ytgyttygar 480
 gcnwsnytn gngcngargt ncarathtg wstnayacna arccnmgnta ycaraargar 540
 ytnaayyttna cncarcaryt nccngayggn gayaaygtny tnytnacnyt ngaygtnwsn 600
 gargarcarg aytytwsntt yytnytnay ytnmgncng tncngaygc nytnaarwsn 660
 ytnnggtaya araaytnac nggncncar aayathacny tnaaycayac ngayytngt 720
 ccntgyytn ntgyathcargt ntggwsnytn garccngayw sngarmngnt ngarttytgy 780
 ccnttymgng argayccng ngcncaymgn aayytnngc ayathgcnmg nytnmgngtn 840
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 aaygcnaacg tnaaygarcc ncargayty carytngtng cnggncaycc naayytngt 1020
 gtncargtnw snacntggga raargtnear ytneargcnt gywsntgggc ngaywsnytn 1080
 ggnccnttya argaygayat gytnytngt garatgaara cnggnytnaa yaayacnwsn 1140
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 aaygaygaya ayatgggnws nytnngggcn tgyccnatgg ayaartayat hcaymgnmg 1320
 tgggtnytn tntggytngc ntgyytnytn ytnngcngc cnytnnttyt ytyytnytn 1380
 ytnaaraarg aymgnmgnaa rgcngcnmg ggnwsnmgna cngcnytnytn nytncaysn 1440
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 ccnytnmgng tngcngtnga yytnnggwsn mgnmgngary tnwsngcnca yggngcnytn 1560
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 ttywsnccng cngcngtngc ncartgyar cartggytnc arytnearac ngtnearccn 1680
 ggnccncayg aygcnytngc ngcnggytn wstngytny tncngaytt yytnearggn 1740
 mgngcnacng gnmgtaygt nggngtnay ttygaygny tnytncaaycc ngaywsngtn 1800
 ccnwsnccnt tymngtngc nccnytnnty wsnynccna cncarytncc ngcnttyytn 1860
 gaygcnytn arggnggntg ywsnacswn gcngnmngc cngcngaymg ngtnearmg 1920
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<210> 4
 <211> 2328
 <212> DNA
 <213> mouse

<220>
 <221> CDS
 <222> (197) ... (2290)

<400> 4

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 caggggagag ggggtctgcc ccccttgggg gggcaggacg gggcctcagg cctgggtgct 180
 gtccggcacc tggaag atg cct gtg tcc tgg ttc ctg ctg tcc ttg gca ctg 232

Met Pro Val Ser Trp Phe Leu Leu Ser Leu Ala Leu
 1 5 10

ggc cga aac cct gtg gtc gtc tct ctg gag aga ctg atg gag cct cag 280
 Gly Arg Asn Pro Val Val Val Ser Leu Glu Arg Leu Met Glu Pro Gln
 15 20 25

gac act gca cgc tgc tct cta ggc ctc tcc tgc cac ctc tgg gat ggt 328
 Asp Thr Ala Arg Cys Ser Leu Gly Leu Ser Cys His Leu Trp Asp Gly
 30 35 40

gac gtg ctc tgc ctg cct gga agc ctc cag tct gcc cca ggc cct gtg 376

Asp 45	Val	Leu	Cys	Leu	Pro 50	Gly	Ser	Leu	Gln	Ser 55	Ala	Pro	Gly	Pro	Val 60	
cta	gtg	cct	acc	cgc	ctg	cag	acg	gag	ctg	gtg	ctg	agg	tgt	cca	cag	424
Leu	Val	Pro	Thr	Arg 65	Leu	Gln	Thr	Glu	Leu 70	Val	Leu	Arg	Cys	Pro	Gln 75	
aag	aca	gat	tgc	gcc	ctc	cgt	gtc	cgt	gtg	gtg	gtc	cac	ttg	gcc	gtg	472
Lys	Thr	Asp	Cys 80	Ala	Leu	Arg	Val	Arg 85	Val	Val	Val	His	Leu 90	Ala	Val	
cat	ggg	cac	tgg	gca	gag	cct	gaa	gaa	gct	gga	aag	tct	gat	tca	gaa	520
His	Gly	His 95	Trp	Ala	Glu	Pro	Glu 100	Glu	Ala	Gly	Lys	Ser 105	Asp	Ser	Glu	
ctc	cag	gag	tct	agg	aac	gcc	tct	ctc	cag	gcc	cag	gtg	gtg	ctc	tcc	568
Leu	Gln	Glu	Ser	Arg	Asn 110	Ala	Ser 115	Leu	Gln	Ala	Gln 120	Val	Val	Leu	Ser	
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Phe	Gln	Ala	Tyr	Pro	Ile 125	Ala	Arg 130	Cys	Ala	Leu 135	Leu	Glu	Val	Gln	Val 140	
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Pro	Ala	Asp	Leu	Val 145	Gln	Pro	Gly	Gln	Ser 150	Val	Gly	Ser	Ala	Val	Phe 155	
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Asp	Cys	Phe 160	Glu	Ala	Ser	Leu	Gly 165	Ala	Glu	Val	Gln	Ile	Trp 170	Ser	Tyr	
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Thr	Lys	Pro 175	Arg	Tyr	Gln	Lys	Glu 180	Leu	Asn	Leu	Thr 185	Gln	Gln	Leu	Pro	
gac	tgc	agg	ggg	ctt	gaa	gtc	cgg	gac	agc	atc	cag	agc	tgc	tgg	gtc	808
Asp	Cys	Arg	Gly	Leu	Glu 190	Val 195	Arg	Asp	Ser	Ile	Gln 200	Ser	Cys	Trp	Val	
ctg	ccc	tgg	ctc	aat	gtg	tct	aca	gat	ggg	gac	aat	gtc	ctt	ctg	aca	856
Leu	Pro	Trp	Leu	Asn 205	Val 210	Ser	Thr	Asp	Gly	Asp 215	Asn	Val	Leu	Leu	Thr 220	
ctg	gat	gtc	tct	gag	gag	cag	gac	ttt	agc	ttc	tta	ctg	tac	ctg	cgt	904
Leu	Asp	Val	Ser 225	Glu	Glu	Gln	Asp	Phe	Ser 230	Phe	Leu	Leu	Tyr	Leu	Arg 235	
cca	gtc	ccg	gat	gct	ctc	aaa	tcc	ttg	tgg	tac	aaa	aac	ctg	act	gga	952
Pro	Val	Pro	Asp 240	Ala	Leu	Lys	Ser 245	Leu	Trp	Tyr	Lys	Asn 250	Leu	Thr	Gly	
cct	cag	aac	att	act	tta	aac	cac	aca	gac	ctg	gtt	ccc	tgc	ctc	tgc	1000
Pro	Gln	Asn 255	Ile	Thr	Leu	Asn 260	His	Thr	Asp	Leu	Val	Pro 265	Cys	Leu	Cys	
att	cag	gtg	tgg	tcg	cta	gag	cca	gac	tct	gag	agg	gtc	gaa	ttc	tgc	1048
Ile	Gln	Val	Trp	Ser	Leu	Glu 270	Pro 275	Asp	Ser	Glu	Arg 280	Val	Glu	Phe	Cys	
ccc	ttc	cgg	gaa	gat	ccc	ggg	gca	cac	agg	aac	ctc	tgg	cac	ata	gcc	1096

Pro	Phe	Arg	Glu	Asp	Pro	Gly	Ala	His	Arg	Asn	Leu	Trp	His	Ile	Ala	
285					290					295					300	
agg	ctg	cgg	gta	ctg	tcc	cca	ggg	gta	tgg	cag	cta	gat	gcg	cct	tgc	1144
Arg	Leu	Arg	Val	Leu	Ser	Pro	Gly	Val	Trp	Gln	Leu	Asp	Ala	Pro	Cys	
				305					310					315		
tgt	ctg	ccg	ggc	aag	gta	aca	ctg	tgc	tgg	cag	gca	cca	gac	cag	agt	1192
Cys	Leu	Pro	Gly	Lys	Val	Thr	Leu	Cys	Trp	Gln	Ala	Pro	Asp	Gln	Ser	
			320					325					330			
ccc	tgc	cag	cca	ctt	gtg	cca	cca	gtg	ccc	cag	aag	aac	gcc	act	gtg	1240
Pro	Cys	Gln	Pro	Leu	Val	Pro	Pro	Val	Pro	Gln	Lys	Asn	Ala	Thr	Val	
		335					340					345				
aat	gag	cca	caa	gat	ttc	cag	ttg	gtg	gca	ggc	cac	ccc	aac	ctc	tgt	1288
Asn	Glu	Pro	Gln	Asp	Phe	Gln	Leu	Val	Ala	Gly	His	Pro	Asn	Leu	Cys	
	350					355					360					
gtc	cag	gtg	agc	acc	tgg	gag	aag	gtt	cag	ctg	caa	gcg	tgc	tcg	tgg	1336
Val	Gln	Val	Ser	Thr	Trp	Glu	Lys	Val	Gln	Leu	Gln	Ala	Cys	Ser	Trp	
					370					375					380	
gct	gac	tcc	ttg	ggg	ccc	ttc	aag	gat	gat	atg	ctg	tta	gtg	gag	atg	1384
Ala	Asp	Ser	Leu	Gly	Pro	Phe	Lys	Asp	Asp	Met	Leu	Leu	Val	Glu	Met	
				385					390					395		
aaa	acc	ggc	ctc	aac	aac	aca	tca	gtc	tgt	gcc	ttg	gaa	ccc	agt	ggc	1432
Lys	Thr	Gly	Leu	Asn	Asn	Thr	Ser	Val	Cys	Ala	Leu	Glu	Pro	Ser	Gly	
			400					405					410			
tgt	aca	cca	ctg	ccc	agc	atg	gcc	tcc	acg	aga	gct	gct	cgc	ctg	gga	1480
Cys	Thr	Pro	Leu	Pro	Ser	Met	Ala	Ser	Thr	Arg	Ala	Ala	Arg	Leu	Gly	
		415					420					425				
gag	gag	ttg	ctg	caa	gac	ttc	cga	tca	cac	cag	tgt	atg	cag	ctg	tgg	1528
Glu	Glu	Leu	Leu	Gln	Asp	Phe	Arg	Ser	His	Gln	Cys	Met	Gln	Leu	Trp	
		430				435					440					
aac	gat	gac	aac	atg	gga	tcg	cta	tgg	gcc	tgc	ccc	atg	gac	aag	tac	1576
Asn	Asp	Asp	Asn	Met	Gly	Ser	Leu	Trp	Ala	Cys	Pro	Met	Asp	Lys	Tyr	
	445				450					455					460	
atc	cac	agg	cgc	tgg	gtc	cta	gta	tgg	ctg	gcc	tgc	cta	ctc	ttg	gct	1624
Ile	His	Arg	Arg	Trp	Val	Leu	Val	Trp	Leu	Ala	Cys	Leu	Leu	Leu	Ala	
				465					470					475		
gcg	gcg	ctt	ttc	ttc	ttc	ctc	ctt	cta	aaa	aag	gac	cgc	agg	aaa	gcg	1672
Ala	Ala	Leu	Phe	Phe	Phe	Leu	Leu	Leu	Lys	Lys	Asp	Arg	Arg	Lys	Ala	
			480					485					490			
gcc	cgt	ggc	tcc	cgc	acg	gcc	ttg	ctc	ctc	cac	tcc	gcc	gac	gga	gcg	1720
Ala	Arg	Gly	Ser	Arg	Thr	Ala	Leu	Leu	Leu	His	Ser	Ala	Asp	Gly	Ala	
		495					500					505				
ggc	tac	gag	cgt	ctg	gtg	gga	gca	ctg	gcg	tcc	gcg	ttg	agc	cag	atg	1768
Gly	Tyr	Glu	Arg	Leu	Val	Gly	Ala	Leu	Ala	Ser	Ala	Leu	Ser	Gln	Met	
	510					515					520					
cca	ctg	cgc	gtg	gcc	gtg	gac	ctg	tgg	agc	cgc	cgc	gag	ctg	agc	gcg	1816

Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser Ala
525 530 535 540

cac gga gcc cta gcc tgg ttc cac cac cag cga cgc cgt atc ctg cag 1864
His Gly Ala Leu Ala Trp Phe His His Gln Arg Arg Arg Ile Leu Gln
545 550 555

gag ggt ggc gtg gta atc ctt ctc ttc tcg ccc gcg gcc gtg gcg cag 1912
Glu Gly Gly Val Val Ile Leu Leu Phe Ser Pro Ala Ala Val Ala Gln
560 565 570

tgt cag cag tgg ctg cag ctc cag aca gtg gag ccc ggg ccg cat gac 1960
Cys Gln Gln Trp Leu Gln Leu Gln Thr Val Glu Pro Gly Pro His Asp
575 580 585

gcc ctc gcc gcc tgg ctc agc tgc gtg cta ccc gat ttc ctg caa ggc 2008
Ala Leu Ala Ala Trp Leu Ser Cys Val Leu Pro Asp Phe Leu Gln Gly
590 595 600

cgg gcg acc ggc cgc tac gtc ggg gtc tac ttc gac ggg ctg ctg cac 2056
Arg Ala Thr Gly Arg Tyr Val Gly Val Tyr Phe Asp Gly Leu Leu His
605 610 615 620

cca gac tct gtg ccc tcc ccg ttc cgc gtc gcc ccg ctc ttc tcc ctg 2104
Pro Asp Ser Val Pro Ser Pro Phe Arg Val Ala Pro Leu Phe Ser Leu
625 630 635

ccc acg cag ctg ccg gct ttc ctg gat gca ctg cag gga ggc tgc tcc 2152
Pro Thr Gln Leu Pro Ala Phe Leu Asp Ala Leu Gln Gly Gly Cys Ser
640 645 650

act tcc gcg ggg cga ccc gcg gac cgg gtg gaa cga gtg acc cag gcg 2200
Thr Ser Ala Gly Arg Pro Ala Asp Arg Val Glu Arg Val Thr Gln Ala
655 660 665

ctg cgg tcc gcc ctg gac agc tgt act tct agc tcg gaa gcc cca ggc 2248
Leu Arg Ser Ala Leu Asp Ser Cys Thr Ser Ser Ser Glu Ala Pro Gly
670 675 680

tgc tgc gag gaa tgg gac ctg gga ccc tgc act aca cta gaa 2290
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<211> 698
<212> PRT
<213> mouse

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35 40 45
Leu Pro Gly Ser Leu Gln Ser Ala Pro Gly Pro Val Leu Val Pro Thr
50 55 60
Arg Leu Gln Thr Glu Leu Val Leu Arg Cys Pro Gln Lys Thr Asp Cys
65 70 75 80

Ala	Leu	Arg	Val	Arg	Val	Val	Val	His	Leu	Ala	Val	His	Gly	His	Trp
				85					90					95	
Ala	Glu	Pro	Glu	Glu	Ala	Gly	Lys	Ser	Asp	Ser	Glu	Leu	Gln	Glu	Ser
			100					105					110		
Arg	Asn	Ala	Ser	Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr
			115				120					125			
Pro	Ile	Ala	Arg	Cys	Ala	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Asp	Leu
	130					135					140				
Val	Gln	Pro	Gly	Gln	Ser	Val	Gly	Ser	Ala	Val	Phe	Asp	Cys	Phe	Glu
145					150					155					160
Ala	Ser	Leu	Gly	Ala	Glu	Val	Gln	Ile	Trp	Ser	Tyr	Thr	Lys	Pro	Arg
				165					170					175	
Tyr	Gln	Lys	Glu	Leu	Asn	Leu	Thr	Gln	Gln	Leu	Pro	Asp	Cys	Arg	Gly
			180					185					190		
Leu	Glu	Val	Arg	Asp	Ser	Ile	Gln	Ser	Cys	Trp	Val	Leu	Pro	Trp	Leu
			195				200					205			
Asn	Val	Ser	Thr	Asp	Gly	Asp	Asn	Val	Leu	Leu	Thr	Leu	Asp	Val	Ser
	210					215					220				
Glu	Glu	Gln	Asp	Phe	Ser	Phe	Leu	Leu	Tyr	Leu	Arg	Pro	Val	Pro	Asp
225					230					235					240
Ala	Leu	Lys	Ser	Leu	Trp	Tyr	Lys	Asn	Leu	Thr	Gly	Pro	Gln	Asn	Ile
				245					250					255	
Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys	Leu	Cys	Ile	Gln	Val	Trp
			260					265					270		
Ser	Leu	Glu	Pro	Asp	Ser	Glu	Arg	Val	Glu	Phe	Cys	Pro	Phe	Arg	Glu
			275				280					285			
Asp	Pro	Gly	Ala	His	Arg	Asn	Leu	Trp	His	Ile	Ala	Arg	Leu	Arg	Val
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Leu	Ser	Pro	Gly	Val	Trp	Gln	Leu	Asp	Ala	Pro	Cys	Cys	Leu	Pro	Gly
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Lys	Val	Thr	Leu	Cys	Trp	Gln	Ala	Pro	Asp	Gln	Ser	Pro	Cys	Gln	Pro
				325					330					335	
Leu	Val	Pro	Pro	Val	Pro	Gln	Lys	Asn	Ala	Thr	Val	Asn	Glu	Pro	Gln
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Asp	Phe	Gln	Leu	Val	Ala	Gly	His	Pro	Asn	Leu	Cys	Val	Gln	Val	Ser
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Thr	Trp	Glu	Lys	Val	Gln	Leu	Gln	Ala	Cys	Ser	Trp	Ala	Asp	Ser	Leu
	370					375					380				
Gly	Pro	Phe	Lys	Asp	Asp	Met	Leu	Leu	Val	Glu	Met	Lys	Thr	Gly	Leu
385					390					395					400
Asn	Asn	Thr	Ser	Val	Cys	Ala	Leu	Glu	Pro	Ser	Gly	Cys	Thr	Pro	Leu
				405					410					415	
Pro	Ser	Met	Ala	Ser	Thr	Arg	Ala	Ala	Arg	Leu	Gly	Glu	Glu	Leu	Leu
				420				425					430		
Gln															

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Leu Gln Leu Gln Thr Val Glu Pro Gly Pro His Asp Ala Leu Ala Ala
      580      585      590
Trp Leu Ser Cys Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Thr Gly
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Arg Tyr Val Gly Val Tyr Phe Asp Gly Leu Leu His Pro Asp Ser Val
      610      615      620
Pro Ser Pro Phe Arg Val Ala Pro Leu Phe Ser Leu Pro Thr Gln Leu
      625      630      635      640
Pro Ala Phe Leu Asp Ala Leu Gln Gly Gly Cys Ser Thr Ser Ala Gly
      645      650      655
Arg Pro Ala Asp Arg Val Glu Arg Val Thr Gln Ala Leu Arg Ser Ala
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Trp Asp Leu Gly Pro Cys Thr Thr Leu Glu
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<210> 6
<211> 2094
<212> DNA
<213> Artificial Sequence

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<220>
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<221> misc_feature
<222> (1)...(2094)
<223> n = A,T,C or G

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<400> 6

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ytntgggayg gngaygtnyt ntgyytnccn ggnwsnytn c arwsngcnc nggncngtn      180
ytngtncna cnmgnytnc racngarytn gtntnmgnt gycncaraa racngaytg      240
gcnytnmgng tnmngntngt ngtncaaytn gcngtncaay gncaytgggc ngarccngar      300
gargcnggna arwsngayws ngarytn carwsnmgna aygcwnsnyt ncargencar      360
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wsntgytggg tnytnccntg gytnaaygt wsnacngay gngayaaygt nytnytnacn      660
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gcnytnaarw snytnntggt yaaraaytn acnggncnc araayathac nytnaaycay      780
acngayytn tncntgyyt ntgyathcar gtntggwsny tngarccnga ywsngarmgn      840
gtngarttyt gycenttymg ngargayccn ggngcncaym gnaayytn gcyathgcn      900
mgnytnmgng tnytnwsncc nggngntng carytngay cncntgytg yytnccnggn      960
aargtnacny tntgytggca rgcncngay carwsnccnt gycarccnyt ngtnccncn      1020
gtncncara araaygcnc ngtnaaygar ccncargay tycarytngt ngcnggncay      1080
ccnaayytn gygtncargt nwsnccntgg garaargtnc arytnccargc ntgywsntgg      1140
gcngaywsny tnggncntt yaargayga atgytnytn tngaratgaa racnggnytn      1200
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wsnacnmgng cngcnmgnyt ngngargar ytnytnccarg ayttymgnws ncaycartgy      1320
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athcaymgnm gntgggtnyt ngtnnggytn gcntgyytny tnytnngcngc ngcnytnnty      1440
ttyttyytny tnytnaaraa rgaymgmgn aargcngcnm gnggnwsnmg nacngcnytn      1500
ytnytncaay sngcngaygg ngcnggntay garmgnytn tngngcnytn ngcwnsngcn      1560
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gtcnathytny tnttywsncc ngcngcngtn gcncartgyc arcartggyt ncarytn car      1740
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ttyytnccarg gnmngncnac nggngmntay gtngngntnt aytytgaygg nytnytnca y      1860

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ccngaywsng tncnwsncc nttymngngtn gcncnytn tywsnytncc nacncarytn 1920
 ccngcnttyy tngaygcnyt ncarggnggn tgywsnacnw sngcnggnmg nccngcngay 1980
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<210> 8
 <211> 692
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 35 40 45
 Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro Thr
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 His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp Cys
 65 70 75 80
 Asp Leu Cys Leu Arg Val Ala Val His Leu Ala Val His Gly His Trp
 85 90 95
 Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Ser Gly
 100 105 110
 Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu Ser
 115 120 125
 Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln Val
 130 135 140
 Pro Ala Ala Leu Val Gln Phe Gly Gln Ser Val Gly Ser Val Val Tyr
 145 150 155 160
 Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr
 165 170 175
 Thr Gln Pro Arg Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro
 180 185 190
 Ala Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu
 195 200 205
 Val Leu Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp
 210 215 220
 Asn Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr
 225 230 235 240
 Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys Leu
 245 250 255
 Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr Asn Ile
 260 265 270
 Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu Trp Gln Ala
 275 280 285
 Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu Leu Asp Ala Pro
 290 295 300

Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp Arg Ala Pro Gly Gly
 305 310 315 320
 Asp Pro Cys Gln Pro Leu Val Pro Pro Leu Ser Trp Glu Asn Val Thr
 325 330 335
 Val Asp Lys Val Leu Glu Phe Pro Leu Leu Lys Gly His Pro Asn Leu
 340 345 350
 Cys Val Gln Val Asn Ser Ser Glu Lys Leu Gln Leu Gln Glu Cys Leu
 355 360 365
 Trp Ala Asp Ser Leu Gly Pro Leu Lys Asp Asp Val Leu Leu Leu Glu
 370 375 380
 Thr Arg Gly Pro Gln Asp Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser
 385 390 395 400
 Gly Cys Thr Ser Leu Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu
 405 410 415
 Gly Glu Tyr Leu Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu
 420 425 430
 Trp Asp Asp Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr
 435 440 445
 Ile His Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala
 450 455 460
 Ala Ala Leu Ser Leu Ile Leu Leu Leu Lys Lys Asp His Ala Lys Ala
 465 470 475 480
 Ala Ala Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp Asp Ser
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 Gly Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu
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 Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser Ala
 515 520 525
 Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr Leu Gln
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 Glu Gly Gly Val Val Val Leu Leu Phe Ser Pro Gly Ala Val Ala Leu
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 Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro Gly Ala His Gly
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 Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys Val Leu Pro Asp Phe
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 Phe Thr Leu Pro Ser Gln Leu Pro Asp Phe Leu Gly Ala Leu Gln Gln
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 Pro Arg Ala Pro Arg Ser Gly Arg Leu Gln Glu Arg Ala Glu Gln Val
 645 650 655
 Ser Arg Ala Leu Gln Pro Ala Leu Asp Ser Tyr Phe His Pro Pro Gly
 660 665 670
 Thr Pro Ala Pro Gly Arg Gly Val Gly Pro Gly Ala Gly Pro Gly Ala
 675 680 685
 Gly Asp Gly Thr
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